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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Scott Phillip Neale TAYLOR	)
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TITLE:	A VEHICLE WITH A STEERABLE WHEELSET	

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AMENDED CLAIMS

1-13. (cancelled)

14. (currently amended) A vehicle with at least one steerable wheelset adapted to run on a guideway having two primary running faces laterally offset about the centerline of the guideway, and at least one secondary running face lying adjacent to at least one of said primary running faces, the wheelset comprising a pair of wheels, each wheel located on opposite sides of the wheelset adapted to engage with a respective one of the two primary running faces, the vehicle further comprising sensing means for sensing lateral displacement of the wheelset with respect to ~~a longitudinally disposed reference path,~~ the at least one secondary running face, the sensing means producing a signal for a control system operably connected to an actuating means to steer the wheels in response to the sensed lateral displacement, the axes of rotation of the wheels and the primary running faces are inclined downwardly toward the guideway centerline, and one of the wheels is adapted to engage with the at least one secondary running face.

15. (original) A vehicle as claimed in Claim 14, wherein each wheel exerts an engagement force with its respective primary running face, the engagement force on each wheel comprising a perpendicular component to its respective primary running face and a parallel component to its respective primary running face substantially perpendicular to the guideway centerline, wherein horizontal forces acting on the wheelset substantially transversed to the guideway centerline are substantially resisted by the sum of the horizontal vectors of the perpendicular components.

16. (currently amended) A vehicle as claimed in Claim 14, wherein each wheel exerts an engagement force with its respective primary running face at a contact zone, the engagement force on each wheel comprising a first component perpendicular to its respective primary running face and a second component parallel to its respective primary running face substantially transverse to the guideway centerline, wherein a first plane perpendicular to the axis of rotation of one of the wheels passes through the centroid of its respective contact zone, and a second plane perpendicular to the ~~axis if~~ axis of rotation of the other wheel passes through the centroid of its respective contact zone, the first and second planes intersecting along an intersection line disposed above and between the wheels, wherein horizontal forces acting on the wheelset substantially transverse to the guideway centerline at or near the intersection line are substantially resisted by perpendicular components of the engagement forces acting at the primary running faces, such that substantially all of the parallel components of the engagement forces acting at the primary running faces are available to steer the wheelset.

17. (original) A vehicle as claimed in Claim 16, wherein the intersection line passes through the center of gravity of vehicle.

18. (original) A vehicle as claimed in Claim 14, wherein the sensing means comprises at least one sensor located either ahead or behind the wheelset, or laterally offset with the wheelset.

19-48. (cancelled)